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AGRICULTURAL MEMORANDUM NO 465

Expectancy of Heavy Winter Rainfall - EAST MIDLANDS

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Long-term records of 29 rainfall stations in the East Midlands were examined to determine the probable heaviest falls in 1 year, 2 years, 10 years over 1 and 5 days (Rainfall in millimetres). Period - November to April.

Results

County	No of Stations	Mean Annual Rainfall	Heaviest 1 day falls in			Heaviest 5 day falls in		
			1 year	2 years	10 years	1 year	2 years	10 years
Leicester, Rutland	6	655	18.7	22.8	30.7	36.5	42.5	52.8
Nottingham	11	665	19.6	24.1	33.7	37.5	44.5	57.8
Kesteven	5	615	18.2	23.2	33.0	35.4	41.4	52.0
Lindsey	7	632	18.3	21.7	31.6	35.2	41.0	52.4

Combining these counties and re-analysing:

Rainfall Range	No of Stations	Mean Annual Rainfall	Heaviest 1 day falls in			Heaviest 5 day falls in		
			1 year	2 years	10 years	1 year	2 years	10 years
560-600	3	587	17.7	21.7	31.3	34.3	40.0	50.7
600-625	9	612	18.2	23.0	31.9	35.1	41.0	51.6
625-650	5	638	18.8	23.0	31.8	35.8	42.6	53.8
650-690	6	669	19.3	23.2	32.5	37.0	43.5	55.7
over 690	6	711	20.0	24.0	34.3	39.0	46.0	60.2

These results can be smoothed for the area concerned; county correction factors can be used for small regional differences.

Average Annual Rainfall	Heaviest in 1 day			Heaviest in 5 days		
	1 year	2 years	10 years	1 year	2 years	10 years
550	17.0	21.2	30.2	32.7	38.1	47.2
600	18.0	22.2	31.4	34.6	40.5	51.1
650	18.9	23.1	32.5	36.5	42.9	54.9
700	19.9	24.1	33.7	38.4	45.3	58.8
750	20.8	25.0	34.8	40.3	47.7	62.6